

Dear FCC, Please consider carefully the consequences of the NPRM. In the rush to deploy broadband internet technology, of which I am a paying user and advocate, the FCC and the electric utilities are promoting a costly deployment that could spell the end of not only domestic, but also international high frequency radio communication. This system is called Broadband over Power Lines (BPL). It currently uses and proposes to increase radiated emissions at radio frequencies used by licensed radio services. These licensed radio services include governments, business, public safety, maritime, and amateur radio operators. International shortwave broadcasters use these frequencies to reach audiences around the globe. Amateur radio operators daily use simple wire antennas emitting signals, some with effective radiated power measured in milliwatts, to communicate effectively with stations in countries all over the world. Compare these weak signals to the BPL signals that will be transmitted by power lines, which are essentially wire antennas that are hundreds of yards long. These BPL signals will not only overpower signals to be received in close proximity to the BPL service area, but will also be heard around the world due the natural propagation of radio frequency energy at the frequencies proposed for use. These radio frequencies are a global treasure and their use is very carefully regulated at regular World Radio Conference meetings.

The NPRM mentions interference mitigation, but what mitigation is there for the shortwave listener listening to broadcasts from a distant land at 3AM while BPL overpowers reception of the signal from the distant transmitter? Can he or she call the electric utility's customer service line and ask them to change the frequency of the BPL signal so the broadcast can be enjoyed? Anyone who thinks this is a realistic scenario has never dealt with a phenomenon called "power line noise". Correction of power line noise problems at best takes days to weeks with a cooperative utility. Many more incidents take months to years with some never being resolved.

Several countries including Japan have banned the deployment of BPL due to the insurmountable problem of radio frequency interference caused by BPL. If a technological powerhouse such as Japan cannot resolve the problem, what is the hope that this nation with its patchwork of electric utilities could ever effectively regulate BPL to not cause interference? Regulations simply cannot change the laws of physics. Power lines simply are open radiators for BPL signals. Even cable TV companies carefully maintain their "closed" distribution systems to prevent radio frequency interference. Of course, they have the advantage of having started their distribution systems using shielded cable, something the electric utilities cannot and will not do.

Better alternatives already exist. Of course the existing and still expanding network of broadband cable and DSL services are two better systems. They have been proven to cause minimal or no radio frequency interference. BPL test areas, operating at the current lower emission levels, have been shown to literally "wipe out" radio reception at the frequencies of interest. Providers are developing wireless systems to serve areas not currently served by the cable and DSL providers, and these systems will provide yet another alternative in those areas that have cable or DSL service.

BPL is a bad idea and increasing the allowable emissions to facilitate its widespread deployment is a mistake that will adversely affect millions of users, broadcasters, and listeners of the high frequency spectrum. The FCC is chartered with protecting and regulating the usage of these frequencies. To allow a system that radiates unintentionally on these frequencies is a

travesty to the licensed users. To allow an increase in those emissions would be irresponsible. Please do NOT allow an increase in allowable emissions.

Thank you,

Joseph Hanna